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09/930,040	08/14/2001	Yong Wang	B-1482-DIV	1189

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EXAMINER

NORTON, NADINE GEORGIANNA

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-9

**Office Action Summary**

Application No.

09/930,040

Applicant(s)

WANG ET AL.

Examiner

Nadine Norton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 February 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14 is/are allowed.
- 6) ☒ Claim(s) 15-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC §102/103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15-25 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Priegnitz et al.(6,162,267).

Applicants are claiming a steam reforming catalyst selected from the group consisting of rhodium, iridium, nickel, palladium, carbide of group VIB and combinations thereof.

The reference of Priegnitz et al.(6,162,267) discloses a steam reforming process employing a reforming catalyst selected from noble metals (Pt, Pt, Rh) combined with Ni or Co

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on a spinel support, i.e. magnesium aluminate. See column 5, line 63- column 6, line 20. The support can also include magnesia. See column 5, lines 66-67.

The reference of Priegnitz et al.(6,162,267) succeeds at disclosing a catalyst with components corresponding to those claimed by applicants.

It is noted that Priegnitz et al.(6,162,267) is silent about applicants' specifically claimed composition conversion characteristics. However, the disclosed composition would inherently possess such conversion characteristics because the physical composition is the same.

In addition, it is noted that the reference does not disclose applicants' specifically claimed method of making limitations. However, such limitations are considered to be product by process limitations. As a result, applicants' final product does not distinguish over the applied art because it has been held that patentability is based on the final composition and not the method by which it was made. See In re Marosi, 218 USPQ (Fed. Cir. 1983) and In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985).

In addition, applicants' product conversion characteristics would obviously be provided upon producing the composition of Priegnitz et al.(6,162,267).

#### ***Claim Rejections - 35 USC § 102/103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bhore et al.(5,741,469), Avidan et al.(5,728,358), or Fujitani et al.(4,367,166).

The reference of Bhore et al.(5,741,469) discloses a composition containing a magnesium aluminate spinel support and rhodium, iridium, platinum, palladium, or nickel. See column 8, lines 5-10 and 60-66. The magnesium alumina is magnesia rich. See column 10, lines 35-46.

The reference of Avidan et al.(5,728,358) discloses a composition containing a magnesium aluminate spinel support and rhodium, iridium, platinum, palladium, or nickel. See column 8, lines 5-10 and 60-66. The magnesium alumina is magnesia rich. See column 12, lines 36-41.

The reference of Fujitani et al.(4,367,166) discloses a steam reforming catalyst containing rhodium deposited on magnesia aluminate spinel. See abstract and column 2, lines 1-20. The reference also teaches an additional oxide of magnesium component. See column , lines 16-25.

The references of Bhore et al.(5,741,469), Avidan et al.(5,728,358), or Fujitani et al.(4,367,166)

It is noted that the applied references are silent about applicants' specifically claimed composition conversion characteristics. However, the disclosed compositions would inherently possess such conversion characteristics because the physical composition is the same as that claimed by applicants.

It is also noted that the applied references do not disclose applicants' specifically claimed method of making limitations. However, such limitations are considered to be product by process limitations. As a result, applicants' final product does not distinguish over the applied art because it has been held that patentability is based on the final composition and not the method by which it was made. See In re Marosi, 218 USPQ (Fed. Cir. 1983) and In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985).

In addition, applicants' product conversion characteristics would obviously be provided upon producing the compositions of Bhore et al.(5,741,469), Avidan et al.(5,728,358), or Fujitani et al.(4,367,166).

***Claim Rejections - 35 USC § 102/103***

Claims 1-19 and 24-25 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tanaka et al.(4,088,608).

The reference of Tanaka et al.(4,088,608) discloses a reforming catalyst which is supported on a magnesium aluminate spinel. The catalyst contains Pt, Pd, and/or rhodium. See abstract and column 12, lines 25-30.

The reference of Tanaka et al.(4,088,608) succeeds at disclosing catalyst components corresponding to those claimed by applicants.

It is noted that Tanaka et al.(4,088,608) is silent about applicants' specifically claimed composition conversion characteristics. However, the disclosed composition would inherently possess such conversion characteristics because the physical composition is the same.

In addition, it is noted that the reference does not disclose applicants' specifically claimed method of making limitations. However, such limitations are considered to be product by process limitations. As a result, applicants' final product does not distinguish over the applied art because it has been held that patentability is based on the final composition and not the method by which it was made. See In re Marosi, 218 USPQ (Fed. Cir. 1983) and In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985).

In addition, applicants' product conversion characteristics would obviously be provided upon producing the composition of Tanaka et al.(4,088,608).

#### ***Allowable Subject Matter***

Claims 10-14 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:  
The prior art does not disclose or suggest a catalyst composition with the specific structure defined in applicants' claim 1.

#### ***Response to Arguments***

Applicants' declaration filed 2-19-03 in paper no.8 is not sufficient to overcome the previous rejection over because it does not show that all of applicants' claimed catalysts components (e.g. Pt, Pd, or carbides) were conceived prior to the date of Priegnitz et al.(6,162,267).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadine Norton whose telephone number is 703-305-2667. The examiner can normally be reached on Monday through Thursday from 8:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

N.N.

May 3, 2003

**NADINE G. NORTON**  
**PRIMARY EXAMINER**

